

## CONTROL OF JITTER BUFFER SIZE AND DEPTH

### Abstract of the Disclosure

5 A packet data communication system that includes a mobile station having a jitter  
buffer and a wireless infrastructure having a base site serving the mobile station controls  
a size or depth of the jitter buffer. The size or depth is controlled based on based on a  
number of retransmissions of erroneously received data employed by the system, a radio  
frequency load of the base site, and a round trip time period for acknowledgments and  
corresponding retransmissions. The jitter buffer size may be further controlled by use of  
10 a supplemental channel to expedite the transmission of data and thereby fill up the jitter  
buffer more quickly and by reducing the waiting period for retransmission of the  
acknowledgments, thereby reducing the round trip time period.

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